## PRESIDENTIAL ADDRESS

DELIVERED AT THE ANNIVERSARY MEETING OF THE

# ROYAL ANTHROPOLOGICAL INSTITUTE

OF

GREAT BRITAIN AND IRELAND.

BY

PROFESSOR WILLIAM GOWLAND, A.R.S.M., F.S.A., F.I.C.,

Professor of Metallurgy at the Royal School of Mines.

# THE BURIAL MOUNDS AND DOLMENS OF THE EARLY EMPERORS OF JAPAN.

[WITH PLATES I-VIII.]

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland.

3, HANOVER SQUARE, LONDON, W.



### PRESIDENTIAL ADDRESS

DELIVERED AT THE ANNIVERSARY MEETING OF THE

## ROYAL ANTHROPOLOGICAL INSTITUTE

OF

### GREAT BRITAIN AND IRELAND.

BY

PROFESSOR WILLIAM GOWLAND, A.R.S.M., F.S.A., F.I.C.,

Professor of Metallurgy at the Royal School of Mines.

# THE BURIAL MOUNDS AND DOLMENS OF THE EARLY EMPERORS OF JAPAN.

[WITH PLATES I-VIII.]

PUBLISHED BY THE

Royal Anthropological Institute of Great Britain and Ireland.

3, HANOVER SQUARE, LONDON, W.



https://archive.org/details/burialmoundsdolm00gowl

### PRESIDENT'S ADDRESS.

## THE BURIAL MOUNDS AND DOLMENS OF THE EARLY EMPERORS OF JAPAN.

By Professor William Gowland, A.R.S.M., F.S.A., F.I.C.

[WITH PLATES I-VIII.]

WE have but little exact knowledge of the mode in which the Japanese disposed of the bodies of their famous dead in the very earliest times. The somewhat vague statements of their ancient traditionary records would seem to point to burial or mere deposition on the summits of natural hills as their earliest practice, but the most ancient remains yet discovered have not been found in such localities, but on the lower grounds bordering the plains, and on the plains themselves. remains, which consist of bronze swords and arrowheads, personal ornaments of steatite, jasper, rock crystal, and other stones, and along with which no objects of iron occur, are generally found at but slight depths below the surface of the ground. It is impossible to say with absolute certainty whether they had or had not been originally covered with mounds of earth. If they had been so covered and the mounds were of only small dimensions, the action of long weathering or the agricultural operations of bygone ages would have amply sufficed to level and destroy them. The mass of evidence is in favour of the belief that low mounds had been erected over them and that the Japanese were a race of mound builders in very early times indeed.

<sup>&</sup>lt;sup>1</sup> "On the Stone Figures at Chinese Tombs and the Offering of Living Sacrifices." By W. F. Mayers. *Proc. N. China Branch of the Asiatic Society*. March, 1878.

its frontiers, it is not impossible that the Japanese may have been mound builders before they migrated from their old home on the mainland. Whether this

6

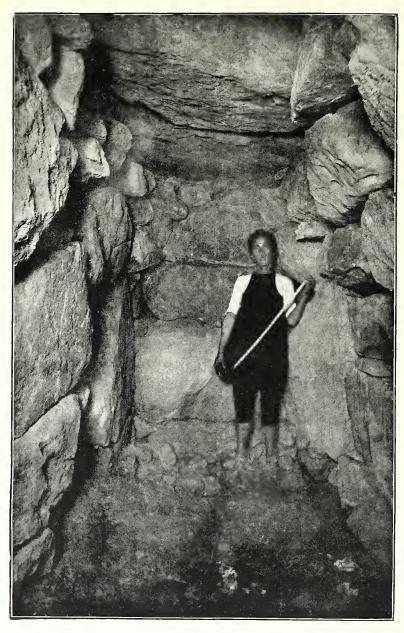


FIG. 1.—INTERIOR OF DOLMEN AT TSUKAHARA (SETTSU).
(Reproduced by the countesy of the Council of the Society of Antiquaries.)

supposition may be correct or not, it is certain that the race practised mound burial, especially in the western parts of the islands they now occupy, several centuries before our era.

That the simple mounds preceded those that contain a rude stone chamber which we call a dolmen, is also not open to doubt, for associated with them we find the rudest hand-made pottery, and neither this pottery nor the swords of bronze previously mentioned have ever been discovered in dolmens. Stone beads and ornaments and sometimes bronze arrow-heads are, however, found in dolmens, but then they occur along with weapons and objects of iron and beads of glass. The period of the dolmens is thus a continuation of that of the simple mounds. During the dolmen period, and certainly after it, the building of simple mounds still survived, but sarcophagi of wood, stone or terra-cotta, of which there are no traces in those of the earliest date, were then used in the burials.

Excepting the carliest mounds, all others enclose either dolmens or sarcophagi. Those containing dolmens are generally older than those containing sarcophagi; there are, however, several examples in which both classes are undoubtedly contemporaneous.

Burial mounds containing dolmens are very numerous in Japan, many hundreds are known to me. Of these I have carefully examined over four hundred. A detailed account of their various forms, distribution and contents will be found in *Archwologia*, vol. lv, p. 439 et seq.<sup>2</sup>

All dolmens, with one or two exceptions of late date, are constructed of rude unhewn blocks, often weathered boulders just as taken from the mountain sides; but in some localities where there is an outcrop of suitable rock, some of the stones seem to have been roughly quarried. A view of the interior of a typical dolmen is given in Fig. 1, and the exterior of a mound in Plate I.

Usually the dolmen is covered by a simple conical, circular, or somewhat elongated, mound; the mounds, however, with which we are specially concerned in this paper arc of an entirely different form.

They are generally known as *misasagi* or imperial burial mounds, and are of more than usual interest, as, so far as my knowledge goes, they are peculiar to Japan.

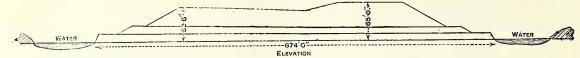
From their form they may be not inaccurately termed "double" mounds although they never contain more than one dolmen. Fig. 2, which is drawn from my surveys, represents a typical one in the neighbourhood of Nara (Yamato). Although it is of considerable size it is not one of the largest, yet I have selected it for description as it is in a better state of preservation than any others I have seen, and besides I was able to go upon it and make careful measurements—as it had not, until I called attention to it, received official recognition as an imperial tomb, whereas in other cases this was prohibited, and I had then to make my observations from outside the moats.

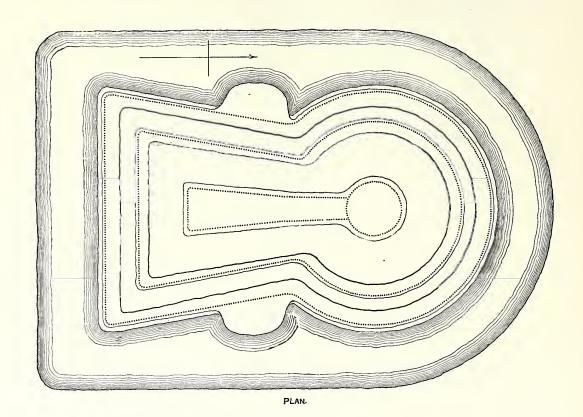
As seen in plan, Fig. 2, it appears to consist of a circular mound combined with

<sup>&</sup>lt;sup>1</sup> The term "dolmen" is used in this paper in its broad or generic sense, and signifies a stone burial chamber, generally of rude megalithic structure, larger than a cist, covered by a mound.

<sup>&</sup>lt;sup>2</sup> Gowland, The Dolmens and Burial Mounds in Japan.

another intermediate in form between a triangle and a square. But as there are no triangular mounds in Japan, and no symbolic use of the triangle until comparatively late times, I think, the form may be regarded as a combination of a circular with a square mound. This curious shape is doubtless not without symbolic meaning, yet Japanese archæologists have not been able to give any satisfactory interpretation of it.





Q 50 100 SCALE OF FEET 300 400

FIG. 2.—DOUBLE MOUND NEAR NARA (YAMATO).

(The dotted lines on the plan represent the positions of the rows of Terra-cotta Tubes.)

(Reproduced by the courtesy of the Council of the Society of Antiquaries.)

The circular end rises in the form of a truncated cone forming a flat peak 113 feet in diameter at its summit, and this is always the highest part of these mounds. The square end, on the other hand, has no distinct peak, its summit being an inclined plane, also flat, about 215 feet long, rising at a gentle angle from the inner slope of the conical peak, and terminating in a long, straight edge, 90 feet long, at right angles to the middle line of the mound.

Some of these mounds, especially when seen from a distance, appear to have two peaks, and from this feature the name "futa-go-yama" or twin hills¹ has been applied to them, but on examining them closely I have always found that there was only one original peak, and that the other had been formed by the excessive weathering of the narrower part of the square end.

The word 皇 *Misasagi* or *Teiryō*, is often applied to them as a specific name, but this is not strictly correct, as its meaning is merely "imperial mausoleum," and in that sense is used for all imperial tombs of whatever form, whether they are double or simple mounds.¹

The burial, whether in a dolmen or sarcophagus, invariably took place in the circular end of the mound. In the square end no remains of any interment have ever been found, but on its surface fragments of ceremonial vessels sometimes occur, indicating that some of the funeral or subsequent rites were celebrated there.

The chief dimensions of this mound are:--

```
Total length of base ... ... ... ... ... 674 feet. Extreme length of square end ... ... 425 ,, Diameter of round end ... ... 420 ,, Height of conical peak ... ... ... 65 ,, Height of terminal edge of square end ... 52\frac{1}{2} ,
```

The exact relative proportions which these measurements bear one to another differ in nearly every one of these double mounds, but the proportions of length and breadth generally range from 1.42: 1 to 1.58: 1.

These mounds have usually terraced sides. In the example shown in the diagram there are two well-formed terraces completely encircling it. In some smaller mounds there is only one terrace or none, but in those of the largest size there are often three. At the re-entering angle on each side a projection about 55 feet broad, now generally of irregular form, but probably originally semicircular, extends from the lowest terrace into the moat, and upon this there is generally a low, circular mound.

The moat has an average breadth of 100 feet, and completely surrounds the mound. Nearly all these double mounds possess a wide moat, although some, from their position on sloping ground, are not surrounded by one. Others, as the huge mound of the Emperor Nintoku, in Izumi, and another, also of vast size, near Fujiidera (Kawachi), had two moats encircling them. Around the outer embankment of the moat of several of the larger mounds, small conical mounds are ranged at varying distances apart.

A curious feature which they all possess is the rows of terra-cotta tubes termed "haniwa," with which the borders of their summits, terraces and moats, are

Hyōtan-yama = Hill resembling a bottle gourd.
Samisen-dzuka=Mound of the shape of a Japanese lute.
Cha-usu-yama = Hill of the shape of a mill for grinding tea.

<sup>&</sup>lt;sup>1</sup> Other names by which they are popularly known are :

lined. One of these tubes is represented in Fig. 3. It is 1 foot 1 inch to 1 foot 3 inches in diameter, 1 foot 5 inches long, and  $\frac{1}{2}$  to  $\frac{3}{4}$  inch thick, and is

strengthened by three horizontal ridges encircling it. Two holes 2 inches in diameter are pierced in it opposite each other near its middle.

In each row these tubes are set upright from 3 to 6 inches apart, and are almost completely buried in the earth, about an inch or so only being exposed. On this mound the row which encircles the entire summit is 8 feet, that on the upper terrace only 4 feet from the edge. On the lower terrace the tubes are exposed, and are being washed away by the water of the moat (Fig. 4).

The total length of the rows on this mound, if placed in a straight line, would exceed  $1\frac{1}{3}$  miles, whilst the number of tubes at the lowest computation is not less than 4,740, exclusive of those on the embankment of the moat.

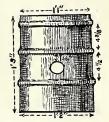




FIG. 3.—HANIWA. TERRA-COTTA TUBE.

It is difficult to determine, with absolute certainty, the exact intention of the early Japanese in using these rows of terra-cotta tubes. It may be that they were placed in the positions we have seen for structural reasons, to aid in preserving the form of the summit and terraces of the mound and



FIG. 4.—TERRA-COTTA TUBES ON THE LOWER TERRACE OF AN IMPERIAL MOUND.

NARA (YAMATO).

the embankment of the moat from being destroyed by weathering, but, if so, it is not obvious why they were ever buried as far as 8 feet from the edge they were intended to protect.

On the other hand they may have been intended to represent the retainers, who, in earlier times, were immolated on the mound, but to this it may be objected that they would then have borne at least some rough resemblance to the human form, or some indications that they represented it. They occur, too, on mounds upon which rude terra-cotta human figures have been found along with them. Possibly there may be some truth in both suppositions.

Opposite the square end and on the outer embankment of the moats of these imperial burial mounds is the "kakusaku" or sacred enclosure, where offerings are made to the *manes* of the deceased emperor on the anniversary of his death. This will be described later when describing the *misasagi* of the Emperor Keitai.

Frequent mention occurs in Japanese literature of the ancient custom of burying human beings and horses at the tombs of members of the imperial family and of chieftains. The most important passages are in the *Nihongi*.<sup>1</sup>

(2 B.C.) "28th year, Winter, 10th month, 5th year. Yamato-hiko no Mikoto, the Emperor's younger brother by the mother's side, died. 11th month, 2nd day. Yamato-hiko was buried at Tsukizaka in Musa. Thereupon his personal attendants were assembled, and were all buried alive upright in the precinct of the misasagi. For several days they died not, but wept and wailed day and night. At last they died and rotted. Dogs and crows gathered and ate them."

"The Emperor Suinin, hearing the sound of their weeping and wailing, was grieved in heart, and commanded his high officers, saying: 'It is a very painful thing to force those whom one has loved in life to follow him in death. Though it be an ancient custom, why follow it if it is bad? From this time forward take council, so as to put a stop to the following of the dead."

(A.D. 3.) "32nd year, Autumn, 7th month, 6th day. The Empress Hibasuhime no Mikoto died. Some time before the burial, the Emperor commanded his ministers, saying: 'We have already recognised that the practice of following the dead is not good. What should now be done in performing this burial?' Thereupon Nomi no Sukune came forward and said: 'It is not good to bury living men upright at the tumulus of a prince. How can such a practice be handed down to posterity? I beg leave to propose an expedient which I will submit to your Majesty.' So he sent messengers to summon up from the Land of Idzumo a hundred men of the clay workers Be. He himself directed the men of the clay workers Be to take clay and form therewith shapes of men, horses, and various objects which he presented to the Emperor, saying: 'Henceforward let it be the law for future ages to substitute things of clay for living men, and to set them up at tumuli.' Then the Emperor was greatly rejoiced, and commended Nomi no

<sup>&</sup>lt;sup>1</sup> Nihongi. Chronicles of Japan from the Eurliest Times to A.D. 697. Completed, A.D. 729. Translation by W. G. Aston, C.M.G., vol. i, pp. 178-181.

Sukune, saying: 'Thy expedient hath greatly pleased our heart.' So the things of clay were first set up at the tomb of Hib asu-hime no Mikoto. And a name was given to those clay objects. They were called Hani-wa (clay rings). Another name is Tatemono (things set up).

"Then a decree was issued, saying: 'Henceforth these clay figures must be set up at tumuli: let not men be harmed.'

"The Emperor bountifully rewarded Nomi-no-Sukune for this service, and

also bestowed on him a kneading place, and appointed him to the official charge of the clay workers Be."

The following examples of these customs as practised in China, are given by Mayers in the paper already referred to.

678 B.C. Human beings were first slain at the grave of the deceased sovereign Wu Kung. The number was 66.

621 B.C. At the death of Emperor Muh Kung 177 were slain.

210 B.C. At the death of Emperor She Kwang-ti, concubines who had borne no children, and others were put to death.

No other later instances are given, but it is recorded that "at the tomb of Hoh Kü-ping (117 B.C.), stone figures of men and horses were arrayed."

In the province of Yamato, after these sacrifices had ceased, there was for some time a pretence of immolating victims. They were shut up in the chamber of the mound

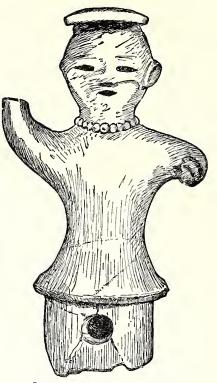


FIG. 5.—TERRA-COTTA FEMALE FIGURE. (Tsuchi- $ningy\bar{o}$ ).  $\frac{1}{5}$  LINEAR.

(Reproduced by the courtesy of the Council of the Society of Antiquaries.)

with the dead, but an opening was left through which they might escape. These persons (termed *ombo*, "smoke vanishing") were, however, considered to be dead, and had to live in districts specially set apart for them.

The custodians of the burial mounds formed another grade of men who were similarly compelled to live apart from the ordinary people. They were termed "shiku." Both these grades usually carried on farming operations.

The figures set up on the ancient burial mounds are called by the Japanese "tsuchi ningyō," a term mercly signifying clay images. They are, with rare

<sup>&</sup>lt;sup>1</sup> According to Mr. W. G. Aston, "the date ascribed to this incident cannot be depended on. At least, Chinese accounts speak of the custom of human sacrifices at the burial of a sovereign as in force in Japan so late as A.D. 247."

exceptions, made of only lightly burnt terra-cotta, generally red in colour. Owing to the perishable nature of this material when exposed to the action of the weather, they would be rapidly destroyed as long as they stood above the ground, and only when by chance they were overturned and became covered with earth, was there any possibility of their preservation, hence but few have survived, and

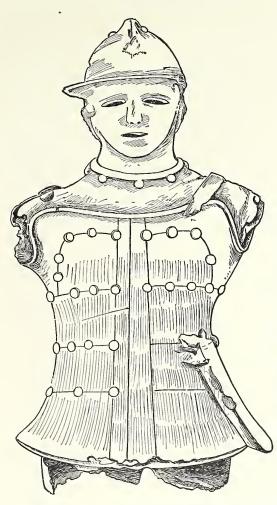


FIG. 6.—TERRA-COTTA MALE FIGURE (*Tsuchi-ningyō*). The pedestal is in the form of a tube  $\frac{1}{2}$  LINEAR.

(Reproduced by the courtesy of the Council of the Society of Antiquaries.)

most of these are in a fragmentary condition. Unfortunately no records have been kept of the positions in which the existing specimens were found, but there is not the least doubt, judging from the forms of their pedestals, that they were set up above the surface of the mound and not buried within it. My own opinion, which is based on the position in which I found a pedestal on a large mound of imperial form, and numerous fragments of terra-cotta, not pieces of ordinary tubular haniwa on others, is that they were so set up around the level summit of circular mounds and of the round peak of the double mounds.

Fig. 5 represents one of these archaic figures from a mound in the province of Kozuke, which I was fortunate in being able to secure, and it is now in the British Museum. From the mode in which the hair is arranged, it is evidently intended to represent a woman; around the neck is a necklace of round beads. The pedestal is in the form of a tube resembling the haniwa previously mentioned, and like them is pierced with two holes through which, it is

said, a bar of wood was fixed to assist in keeping the figure in an upright position on the mound.

In Fig. 6 is illustrated a male figure wearing a helmet, also a curious necklace of the curved ornaments, *magatama*, cylindrical beads alternating, which seems to have been worn only by men. Terra-cotta figures of horses were also frequently set up along with the human figures.

Stone figures, ealled *hayato*, are even rarer than those of terra-eotta; it would hence seem that they had never been extensively used

One from the province of Chikugo, now in the Imperial Museum, Tokyo, is shown in Fig. 7. It is a flat slab 3 feet in height (including the pedestal),  $6\frac{1}{2}$  to 7 inches thick, roughly hewn to represent a man wearing a short sword. On the back are perpendicular incised lines which are supposed by some to represent arrows. The mound from which it was taken is one of the double form, and formerly contained a dolmen but now all the stones are gone.

A curious form in which these guardians of the tomb are represented is shown in Fig. 8, which is a print of a rubbing of one of three rude stones, each of which

has ineised on its surface, in boldly cut lines, a rude drawing of a human figure with the head of a harc. This stone measures  $4.1 \times 1.6 \times 1.0$  feet, and its sides are not hewn but weathered. The others are much smaller. They were found on the top of a burial mound, near Nara, attributed to the Empress Gemmyo, who died in A.D. 721, and near them was also unearthed a hewn stone slab bearing an inscription and the above date.

When I saw them they were in the temple Todaíjí (Nara), and were labelled *Hayato*, which signifies "Imperial guard."

The largest double mounds are situated in the provinces of Izumi, Kawachi, and Yamato, but many others of imposing size I have also found in the provinces of Kozuke, Settsu, Hōki, Izumo, Yamashiro, Harima, Bizen, and Hyūga.

They vary in dimensions from a diminutive example in Hyuga, only 125 feet long and 18 feet high, to the stupendous piles officially recognised as the tombs of the Emperors Nintoku and Riehū in Izumi, and Ōjin in Kawachi, none of which are less than 1,200 feet in length and 60 feet in height. That of

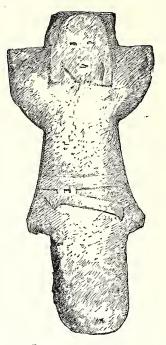


FIG. 7.—STONE FIGURE FROM A DOLMEN MOUND.

(Reproduced by the courtesy of the Council of the Society of Antiquaries.)

Nintoku is specially noteworthy for its vast extent, being about 90 feet high, and with its two moats covering about 80 acres of ground.

The manner in which the dead were disposed in these double mounds is by no means uniform. Some do not contain a megalithic dolmen, but only a sarcophagus of stone or wood not very deeply buried in the round peak. This I have found in some eases surrounded with a low wall of stones, over which larger slabs were laid; in others these walls are wanting, and huge boulders then seem to have been simply placed over the coffir.

<sup>&</sup>lt;sup>1</sup> In the Shaku Nihongi (written in the thirteenth century), it is stated that there were many other figures of men and animals on this mound.

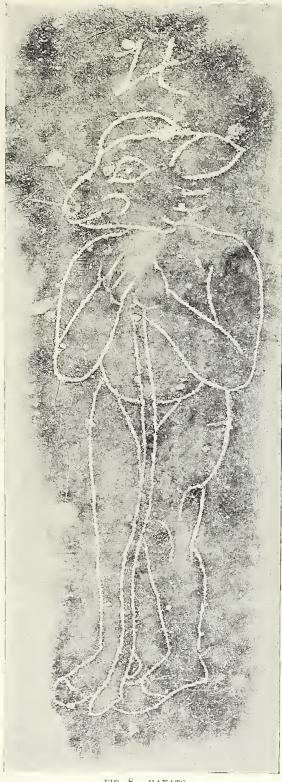


FIG. 8.—HAYATO.

From a Burial mound attributed to the Empress Gemmyo.

(From a rubbing.)

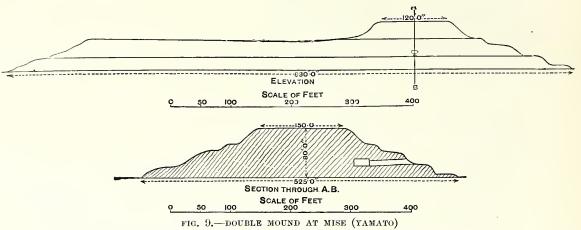
One of the largest and most noteworthy of these double mounds containing a dolmen, is situated in the village of Mise, in the most classic region of the province of Yamato. The vast proportions of this mound, and the magnitude of dolmen within it, exemplify well the importance which the ancient Japanese attached to the sepulture of their illustrious dead. With the exception of the circular mound which forms its eastern peak, it is covered with terraced fields and part of the village. When first erected it cannot have been less than 1,000 feet long and 600 feet broad, although now it is slightly smaller, and the peak is 84 feet high.

A little to the south of Unebiyama, around the villages Mise, Myohoji and Koshi, is the most important dolmen region in the province. Although now the number of dolmens is but few, yet three of these are amongst the most remarkable in Japan, whilst everywhere ruined mounds and piles of broken stones mark the sites of scores of others, some of which were destroyed furnish stones for the modern mausoleum of the Emperor Jimmu.

Fig. 9 represents the mound in longitudinal and transverse sections, showing the position of the dolmen within it. These bring very forcibly before us the comparative insignificance of the burial chamber when contrasted with the vast dimensions of the mound.

The mound which is also shown in Plate II is much dilapidated. Its sides and summit have long been under cultivation, and are clothed with terraced barley fields, excepting a portion at its eastern end, where a grove covers an irregularly rounded mound, which originally formed its peak. Yet on account of its vast size agricultural operations have failed to destroy the chief features of its original form—a double mound of the imperial type with four terraces. The moat has been almost completely absorbed by the surrounding fields so that its width cannot be ascertained.

The dolmen, it will be seen, is situated below the round peak, and lies within the mound at right angles to its long axis; its entrance, which faces south 10° west, being almost on a level with the second terrace. The gallery leading to the



In the elevation the entrance of the dolmen is seen in the side of the mound below the peak. The transverse section shows the position of the dolmen within the mound.

(Reproduced by the courtesy of the Council of the Society of Antiquaries.)

chamber is about 60 feet long, about 8 to 10 feet high, and varies in breadth from 4 to 8 feet. Its roof consists of six huge undressed stones, one of which is 16 feet in length. Its walls are built of similar cyclopean blocks of somewhat smaller size, and all are of the rudest irregular forms without any trace of tool marks. Its floor slopes gradually inwards. I was, unfortunately, able to penetrate only about 40 feet into this dolmen, when I was stopped by water and mud, which had accumulated to a depth of about 4 feet further in, so that I did not reach the chamber, but, so far as I could see it, its structure is the same as the gallery. It contains two stone sarcophagi. Part of the cover of one of these—that placed longitudinally near the middle of the chamber—was just visible above the water. It is of the usual form and size, well hewn, and with projecting lugs. The other sarcophagus, which is placed transversely near the back wall, was not seen, being covered with water. I made two other special journeys to this dolmen during periods of drought, but on neither occasion had the water diminished.

I am hence compelled to rely for the dimensions of the chamber on the figures given in the Sei Seki Dzu Shi, a Japanese archæological work, dealing chiefly with the imperial burial mounds, and published in 1853. In this book it is stated that the length of this chamber is 24 feet, breadth 18 feet, and that its roof consists of three stones. These measurements must be received with some reserve, but the chamber is certainly a large one. According to the author of this book, the dolmen is the tomb of the Emperor Mommu (died A.D. 686) and the Empress Jito (died A.D. 702), but there are no grounds whatever for such an attribution. It is, undoubtedly, an imperial mound, although it is not officially recognised as one by the Imperial Board of Ceremonies at the present time, and the extensive cultivated fields which cover it show that this non-recognition dates from at least a century or two ago. The reasons for its rejection from the official list of the burial mounds of emperors or princes is impossible to conjecture, and especially so when we find so many puny and insignificant mounds are included in it. When we consider that this mound is exceeded in magnitude by only two others—and these are those of the famous Emperors Nintoku and Ojin—that the dolmen it contains is the largest in the country, and is, besides, unequalled as a specimen of megalithic structure, I think we cannot avoid arriving at the conclusion that it is, without doubt, the tomb of an emperor, and from the rude, undressed blocks of its dolmen —a very early one—one of the many of whose lives the ancient books, the "Kojiki" and "Nihongi," contain no record; whose very names are unknown.

The smallest double mound which I have found containing a large chamber is one of a rather extensive group of dolmens with simple mounds which is scattered over the lower slopes of Mount Kazuraki, near the village of Teraguchi (Yamato). The mound is 167 feet long and 32 feet high. The dolmen<sup>1</sup> is the largest in the group, and both gallery and chamber are of rude megalithic structure.

That these large double mounds are the tombs of men of imperial rank of pre-eminent power is, I think, not open to doubt. Their vast bulk implies the labour of many hundreds of men for a considerable time for their construction, and this only a chief or supreme ruler could command. According to Japanese archeologists the earliest is the tomb of the Emperor Annei (c. fourth century A.C.), and the latest that of the Emperor Bidatsu (died A.D. 585). Whilst not accepting the strict accuracy of these dates, there seems to be no reason to doubt that several are as early as one or two centuries or more before our era, and that they continued to be built for five or six centuries after it. During this range in time nearly all the emperors whose names are recorded in the Kojiki, and many whose names and existence have been forgotten, were buried in these double mounds in the central provinces, but I have also found these mounds of imperial form in the important dolmen districts of Izumo, Hoki, Bizen, Kozuke and Hiuga which are remote from the central provinces, the seats of the above recognised emperors. seem to indicate that these regions were once independent centres or were governed by chiefs who were regarded as equals with the central ruling family.

According to the statements of Japanese records the care of the imperial tombs was entrusted to special resident officers from very early times, a custom surviving at the present day. But the appointment of custodians was frequently discontinued, sometimes for a considerable time; the mounds were then neglected and their sanctity was disregarded, and it is probably owing to this that many are now under

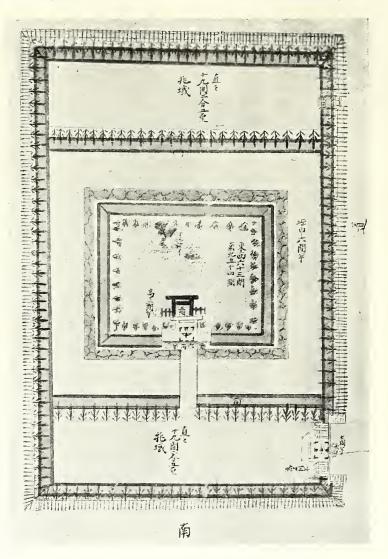


FIG. 10.—MISASAGI OF THE EMPEROR JIMMU. (From a Japanese drawing.)

cultivation, and with numerous others, are not recognised as imperial tombs. Yet, notwithstanding these breaks in the regular succession of custodians, it is not unreasonable to suppose that the most important mounds, those which from their imposing size form such conspicuous objects on the plains, would not altogether lose the early traditions attached to them, and would at least retain the names of the

emperors whose tombs these traditions indicated them to be. If any reliance may be placed on this supposition, then the enormous mounds of Nintoku, Richū and Ōjin may be considered to be the tombs of the emperors whose names they bear, although in the great majority of lesser magnitude the attribution will be doubtful. From this it follows that the building of double mounds reached its zenith about the fourth century of our era.

Before proceeding to deal further with typical misasagi of the double mound form, I will enter into a brief consideration of the misasagi or imperial mausoleum of the Emperor Jimmu, the founder of the Imperial dynasty.<sup>1</sup>

At the foot of the northern side of Mount Unebi, in the province of Yamato, a mound of insignificant size but a few feet in height and diameter, one of a small scattered group, had been long pointed out by tradition as the *misasagi* or burial mound of the Emperor Jimmu, the founder of the Imperial dynasty.

Shortly after the fall of the Shogunate it was recognised as such by the government, and was surrounded with a moat and embankment together with a large tract of the ground around it.

The present emperor visited the *misasagi* on April 3rd, 1877, the anniversary of the death of Jimmu, and was present at the celebration of the annual ceremonies held before it.

It is curious to note that the mound attributed to the first Emperor Jimmu is situated not on Mount Unebi but on the plain at its foot; yet, according to the old traditionary records, the earliest emperors were all interred on the summits or brows of natural hills.

The *misasagi* is of little archæological importance as its construction differs entirely from any of the ancient mansolea. It is difficult to conjecture the grounds on which its form was decided, yet it is worthy of description as showing what is regarded by the government to be a fitting mansoleum for the first of the imperial line.

The misasagi is represented in Fig. 10, which is copied from a Japanese drawing. It consists of an inner square of level ground with sides 358 fect long, containing two low mounds, each about 18 feet in diameter and 2 feet to 3 feet high. This is enclosed by a low embankment and surrounded by a moat containing water. The mound attributed to the Emperor Jimmu is nearer the middle of the square than is shown in the figure. Neither mound is visible, even from the neighbouring slope of Mount Unebi, as the enclosure is thickly planted with trees. Outside the moat, on the north and also on the south side, a broad roadway runs from the east to the west sides of the misasagi, and the whole is enclosed by a turfed embankment surmounted by a fence of stone rails. The entire enclosure is rectangular, and measured along the stone fence is 871 yards in circuit.

<sup>&</sup>lt;sup>1</sup> It is recorded in the Kojiki that in the "76th year of his reign (585 B.C.), on the 11th day of the 3rd month, the Emperor Jimmu died in the palace of Kashiwa-bara. His age was then 127. The following year, autumn, the 12th day of the 9th month, he was buried in the misasagi, north-east of Mount Unebi."

The outer gate of the form usually found at all imperial tombs is shown by a broad line on the outer side of the embankment which crosses the moat.

On the other side of the moat is a wooden torii 18 feet high, and behind this another torii 12 feet high, constructed of stems of the tree hinoki (Thuya obtusa) from which the bark has not been removed. This kind of torii is said to be peculiar to this misasaqi. On each side of the space between the torii is a stone lantern such as are seen at all misasagi.

On one of my visits (2nd April, 1888), I found a new wooden shed had been erected in the space between the two torii just mentioned for the annual ceremony of the 3rd, the date of the death of the emperor, when a representative of the Mikado<sup>1</sup> visits the tomb to make the customary offerings. This officer is called Chokushi or imperial ambassador, and, in addition to the offerings mentioned below

presents a special offering from the Mikado, the nature of which I was unable to ascertain.

The offerings are made on eleven sambo (ceremonial stands of white wood), and consist of products of the sea, river, and mountain such as tai (serranus marginalis), carp, sea weed, salt, water, sake (rice beer), mochi (rice bread), horseradish, oranges, pheasants and wild ducks.

A ceremonial offering of mochi and sake at the outer gate by Shinto priests is illustrated in Plate III. Three sambo, bearing the offerings, are shown on the table in front of the officiating priest.

The public are allowed to go only as far as the gate on the outer side of the moat where they pay reverence to the tomb.

The most ancient Japanese pottery yet found are the rude vessels which were unearthed near the small tumuli of (Reproduced by the courtesy of the this misasagi whilst the present moat was being excavated.

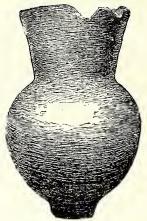


FIG. 11.—TERRA-COTTA VASE (HAND MADE). HEIGHT,  $7\frac{1}{2}$  INCHES.

Council of the Society of Antiquaries.)

Fig. 11 represents one of these, now in the Gowland collection in the British Muscum; others, not much different from it, are figured and described in the Kwanko Dzusctsu, by the late Japanese archeologist Ninagawa.

The misasagi which I now propose to describe is that of the Emperor Keitai who died in A.D. 531, as it is one of the best preserved of all the misasaqi recognised by the Imperial Board of Ceremonies; we will then consider the most important

<sup>1</sup> Mikado. Though this is the name by which the whole outer world knows the sovereign of Japan, it is not that now used in Japan itself, except in poetry and on great occasions. The word is one indicative of the highest respect, as it is but natural that the name used by the Japanese of old to designate their heaven-descended sovereign should be. The Japanese have got into the habit of calling their sovereign by such alien Chinese titles as Senshi, "the son of Heaven"; Sen-ō or Sennō, "the Heavenly Emperor"; Shujō, "the Supreme Master." His designation in the official translation of modern public documents into English is "Emperor." Things Japanese. Basil Hall Chamberlain, 1891, p. 291.

of those of the earlier emperors in the central provinces; and afterwards some typical examples in other centres.

Keitai Tenno.—Born A.D. 450, reigned from 507-531. Residence at Tama ho (Yamato). The misasagi of this emperor is an excellent example of a well-preserved double mound, situated on the plain between Takatsuki and Ota in the province of Settsu. No natural eminence has been taken advantage of in building it, and this, together with the extensive embankments which still bound the moat on two sides, show that its erection must have been a work of great magnitude, although

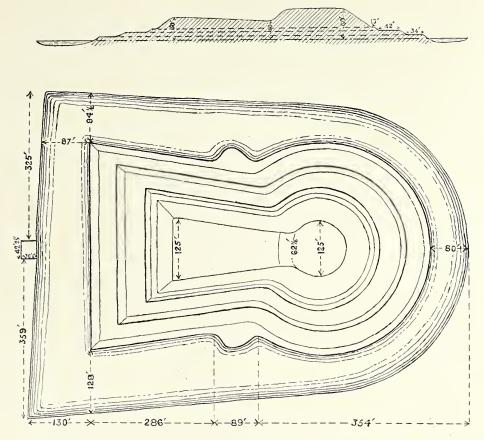


FIG. 12.—PLAN AND SECTION OF THE BURIAL MOUND OF THE EMPEROR KEITAL.

in this respect it falls far behind the enormous piles of Nintoku and Öjin. It possesses for us, however, more than usual interest, as it is the last great example of the double mound period, which, beginning about one or two centuries B.C., reached its zenith during the reigns of Ojin and Nintoku and ended at the death of Yomei A.D. 587. Four emperors succeeding Keitai were interred in double mounds it is true; yet these are all of insignificant dimensions.

During later times the building of large double mounds appears to have been resumed, otherwise it is difficult to explain the occurrence of several both in Yamato and Kawachi with sides, peaks and terraces so little weathered that they seem as if made but a century or two ago, yet no imperial name is attached to them.

The tumulus of the Emperor Keitai, Plate III, is a long terraced mound, the upper portion rising from the third terrace; this terrace, however, is insignificant in size and somewhat ill-defined compared with the two lower terraces.

The base of the mound measures 729 feet in length, 497 feet in breadth at its southern end which is straight, and 465 feet at its opposite and circular end.

Fig. 12, which is drawn from my survey, shows the mound in plan and section.

The moat varies in breadth from 80 feet to 130 feet. The height of the mound could not be satisfactorily measured, but its straight end is not less than 60 feet high above the level of the water in the moat. The top of the round end cannot be well seen as it is covered closely with trees. From the top of the straight end to the base of the round end is 235 feet. At the south end, the lowest terrace is about 34 feet broad and the succeeding one 42 feet.

There is a projection from the lower terrace in the re-entering curve of each long side. These projections are not distinct mounds although they are somewhat higher at the middle than at the sides.

The east bank of the moat has been much cut away, and cultivated fields extend to within a few yards of the moat. On the west side the ground has not been disturbed, and here fragments of *haniwa* occur, although none of the tubes can be seen *in situ*. On the north summit there are said to be three huge stones similar to those of dolmens.

A short distance from the embankment on the west side, nearly opposite the re-entering curve, there is a small circular mound with *haniwa* fragments scattered over it, and two other similar mounds occur near the north-west corner, and remains of several others are seen in the fields on the east.

The kakusaku, or sacred enclosure, shown in Plate IV is of the usual form, On its right is a stone granite pillar, modern, bearing the name of the emperor, and on the left the usual official notice board. Its dimensions are as follows:—Breadth, 42 feet 2 inches; length, 30 feet 2 inches. The torii are each 1 foot in diameter. The front torii is 10 feet  $0\frac{1}{2}$  inch high from the stone lintel to the bottom of the top bar. Both torii are of round hewn timber, both uprights and cross bars.

<sup>1</sup> Official inscription on the notice board at a misasagi.

August Tomb of the Emperor

East to West Ken

North to South Ken

(In some cases only the circuit is given.)

Regulations.

It is not permitted to enter here or to climb the mound. It is not permitted to catch the fish or birds. It is not permitted to cut down the trees or bamboos.

Date

The above notification is to be strictly obeyed.

The fence consists of carefully-hewn wooden posts rising from a horizontal beam which rest on a foundation of one row of squared stones. Within the enclosure there are two stone lanterns, one on each side of the inner torii. The space within the enclosure and also in front of the gate is covered with sand or fine gravel and is kept carefully swept. Outside the gate the sand is carefully hcaped into two conical mounds, one on each side, and when offerings are made here on the appointed days the sand is scattered over this space. The same small mounds of sand may be seen occasionally at the entrances of cremation grounds in the country.

### Chuai Tenno's Misasagi. Pl. V.

Chuai Tenno, born A.D. 149, accession 192, died 200.2.6. Age 52. Residence, Kehi.

The *misasagi*,<sup>1</sup> Plate V, is situated at Fujüdera in Kawachi. It is a double mound surrounded by a moat. The embankment and the tumulus also have been recently repaired and put in order, so that the original shape of the former may

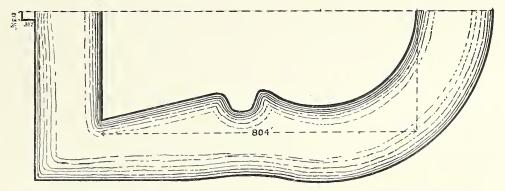


FIG. 13.—PLAN OF EAST HALF OF THE BURIAL MOUND OF THE EMPEROR CHUAI WITH ITS MOAT.

have been slightly altered. The east side of the mound (Fig. 13) is more perfectly preserved than the west, the projection on the latter side being now almost shapeless. The measurements were hence made on the east side only.

The kakusaku is placed on the embankment of the moat, almost opposite the middle of the square end of the end. It faces S. 20° W. The dimensions of the kakusaku enclosure are:—length, 30 feet 2 inches, and breadth, 42 feet 7 inches; gate, 8 feet 6 inches broad. On one visit the moat was almost empty of water, fragments of haniwa, of both red and a bluish colour, were then seen to be strewn along the bottom, both at the base of the tumulus and of the embankment. They were more numerous in the former position.

According to the official notice board, the misasagi measures 651 ken=1,294

<sup>&</sup>lt;sup>1</sup> This *misasagi* was only determined to be that of Chuai about forty-four years ago when it was repaired.

yards in circuit, along the embankment of the moat. The principal dimensions of the mound are:—

						Feet.
Length of	base		• • •	 	• • •	 803
,,	top	• • •	• • •	 	• • •	 381
Breadth of	base,	square	end	 • • •		 $637\frac{1}{2}$
,,	,,	round	,,	 		 560
Height of	round	end ab	out.	 		 70

The most varies in breadth from 109–172 feet. The summit rises from the fourth terrace, which is unusual, most *misasagi* having not more than three terraces. The fourth terrace is, however, very indistinct in places, and may be of later date than the mound, and this, I think, extremely probable, as the summit both at the round and the square end is much less broad than we should expect to find in a *misasagi* of such large dimensions. The other terraces have also been much cut up for some reason which is not apparent.

The projections from the lower terrace, especially that on the east side, are seen to be not of the form of ordinary small round tumuli, but merely prolongations of the lowest terrace, rising about two feet or so from their sides to the middle, with a low rounded surface. Near it are the following mounds:—

A small round mound almost in front of the *kakusaku*, 40 yards distant, and two others.

A similar mound, on east side, in line with the moat at the square base and 150 feet from the embankment.

- ", east side, opposite the curve, and 150 feet from the embankment.
- , west side, in line with the moat at the square base and 50 yards from the embankment.

A double ,, with a moat, very small, lying east and west, about 200 yards north of the north end of the *misasagi*.

There may have been several other small mounds arranged around the outer embankment which have been levelled by the farmers, as cultivation extends quite up to the moat. None of these small mounds, which in Kawachi are ranged around the imperial tumuli, contain dolmens. They are generally simple mounds of earth. In one example near the misasagi of the Emperor Ingio, about  $1\frac{1}{2}-2$  miles distant, an earthen or clay coffin, containing weapons, ornaments, and vermilion, was found buried a few feet below its top. Around or near a misasagi in ancient times, there were, doubtless, buried the wives or concubines and the chief retainers of the emperor. When the misasagi was constructed the small mounds were perhaps made with it, during the lives of those who were, at their death, to be buried in them. And as the coffin is always but shallowly buried in the top of these mounds there would be no difficulty in subsequently using them for interments. Many which have been opened in the neighbourhood of the Kawachi misasagi have been found to contain nothing, others to contain weapons only and no bones, others to contain

25

bones only and no weapons. The absence of bones in those cases where the sarcophagi were found to contain only weapons is not certain, as, in several cases known to me, the bones have disintegrated and fallen to powder, the enamel of the teeth alone being preserved, so that, unless they were very carefully looked for, they would escape observation.

The misasaqi of the recognised emperors earlier than Chuai are so much weathered and dilapidated that they afford no useful measurements for the determination of their original size, I will therefore enter into a brief consideration of the most important of those of his successors. They are all of the type shown in Figs. 2, 12 and 13, so that only a short notice of each will suffice.

The first is the burial mound of the Empress Jingo to whom the conquest of Korea in the early years of the third century A.D., is attributed. The Empress died in A.D. 269.

The mound, which is a large one, is 660 feet long, 418 feet broad, and about 60 to 70 feet high. Its circuit as measured along the outer embankment of the moat is stated on the official notice board to be  $563 \text{ ken} = 1{,}119 \text{ yards}$ .

The misasagi of the Emperor Ojin<sup>1</sup> (died A.D. 310), the son of the Empress Jingo, is situated in the province of Kawachi. It is one of the largest of the recognised imperial mounds, being 2,312 yards or nearly a mile and a third in circuit, as measured along the outer embankment of the moat. Its height at the circular end is said to be about 60 or 70 feet.

The misasagi of the next Emperor Nintoku (died A.D. 399) is shown in Plate V. It is situated near Sakai in the province of Izumi, and is the largest of all the imperial burial mounds. It possesses two moats and three terraces, and is 2,475 yards or nearly a mile and a-half in circuit. The north or circular end is is about 94 feet high. This stupendous pile was erected by the people, doubtless in recognition of the beneficent reign of the emperor.<sup>2</sup>

The misasagi of the Emperor Richu (died A.D. 405), Plate VI, is not far distant from the last. It also is a large mound, but somewhat smaller than those of his two predecessors. Its base is 1,224 feet in length, and the circuit of its moat 871 ken, or 1,742 yards, i.e., about a mile.

The misasagi of the Emperor Ingyo (died A.D. 453), the successor of Richu, is in the province of Kawachi near the village of Domioji. Plate VI.

- <sup>1</sup> This emperor some centuries after his death was deified as the War God Hachiman,
- <sup>2</sup> It is recorded in the Nihongi, that the emperor ascended a high tower and looked far and wide, but no smoke arose in the land; from this he inferred that the people were so poor that none in the houses were cooking rice. He then decreed that for the space of three years no taxes and no forced labour should be imposed. His own palace, for want of funds to repair it, was allowed to become so dilapidated that the roof admitted the rain. Three years later he again ascended the tower and beheld smoke rising from every dwelling. The people were now rich enough to bear taxation without feeling the burden, and voluntarily offered their labour and contributions towards the rebuilding of the palace.

Nintoku is said to have reached the advanced age of 122, but, it must be remembered, that it is not until the next reign that the miraculous details which characterise the early portion of Japanese history cease. In this connection too, it must be noted that the dates I have given, which are those of the Nihongi, before the reign of Richu, should be accepted with reserve.

The mound is 750 feet long and 528 feet broad, and about 60 feet high. According to the official notice board its circuit is 559 ken or 1,111 yards.

The burial mounds of the succeeding emperors up to Keitai are all of comparatively small size and much dilapidated so that none requires any special notice.

Passing now from the central provinces, the recognised sites of the capitals of the early emperors, and crossing over to the opposite side of the island, we find in the province of Izumo burial mounds of imperial form precisely similar to those with which I have already dealt.

The first which I shall describe is a large double mound behind the temple Dainenji, on the borders of the town of Imaichi. It contains a double-chambered dolmen. The mound is very much weathered, but from parts of it which have

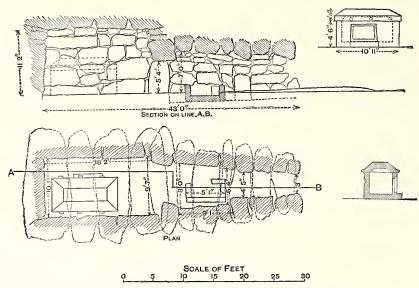


FIG. 14.—DOLMEN CONTAINING TWO STONE SARCOPHAGI AT IMAICHI (IZUMO.)
With elevation and transverse section of largest sarcophagus.

(Reproduced by the courtesy of the Council of the Society of Antiquaries.)

retained their form the original shape and some of its dimensions can be well determined. It possesses two terraces, the floor of the dolmen being on a level with the top of the lowest.

In direction the mound runs E.N.E. and W.S.W., the round end, which contains the dolmen, being directed to the latter quarter.

The dolmen has the same orientation as the round peak, lying longitudinally in the mound, a position which I have not found elsewhere in Japan except at Teraguchi. In all other mounds of this form the direction of the dolmen is at right angles to their length.

As the breadth of the mound is more than sufficiently great to permit the dolmen to have been built in the normal position there must have been some special reason for its unusual position.

#### Dimensions.

```
      Height of round end above the plain
      ...
      42 feet.

      Length of base of upper terrace
      ...
      ...

      , , summit
      ...
      ...

      145
      ,,
```

The dolmen (Fig. 14) is constructed of rude stones, some of which have natural flat faces, but others are much rounded by weathering. It has two chambers, both of which contain stone sarcophagi.

The inner, which is the most capacious, has the following dimensions:—

```
Average Length ... ... ... 18 feet 10 inches.

" Breadth ... ... ... 9 " 9 "

" Height ... ... ... 11 " 2 "
```

Placed longitudinally in it is a huge sarcophagus hewn out of a single block of hard volcanic tuff, measuring internally at the top 9 feet long by 3 feet,  $7\frac{1}{2}$  inches broad; at the bottom 9 feet 4 inches long, 4 feet 5 inches broad, and 3 feet, 6 inches in depth. Its cover is of the usual roof-shaped form with projecting lugs, and is 1 foot 11 inches thick.

This sarcophagus is one of the largest I have found, and is remarkable also for the curious opening hewn in its front side. The opening is 4 feet 4 inches long by 2 feet 4 inches high and is recessed to receive a slab by which it was closed. Below it the bottom of the sarcophagus projects in the form of a step, upon which the slab rested. This peculiar feature is seen in three other sarcophagi in dolmens not far distant, and seems to be confined to the province of Izumo, as it has not yet been found elsewhere. As to the purpose it can have served I am unable to offer any explanation. It is too large to be intended for the introduction of offerings of food, or for the egress or ingress of the spirit of the dead.

The other chamber is much smaller than the inner, being only about 10 feet long, 9 feet high, and tapering from 8 feet at one end to 6 feet 4 inches at the other. Its floor is nearly 18 inches lower than that of the inner. The sarcophagus which it contains is much smaller, and is constructed of slabs somewhat roughly hewn. Its cover is broken up and also its front side.

Its internal dimensions are:—length, 5 feet 1 inch; breadth, 2 feet 5 inches; depth, 1 foot  $10\frac{1}{2}$  inches.

The inner chamber is partially separated from the outer by large stones which project like rude lintels from the walls on each side and also by a huge capstone resting upon them. The outer chamber is also marked off from the entrance gallery by similar side stones and a depression of the roof.

The total length of the dolmen from the back wall to the entrance of the gallery is 43 feet, and its breadth diminishes from 10 feet 1 inch at its inner extremity to 3 feet at its entrance.

This dolmen, I was informed, was opened in 1825, its floor was then covered with small round stones: since that date it has stood open. A large quantity of

metallic remains, and many vessels of pottery, were taken out, but unfortunately all have been lost excepting the following, which are now kept in the temple:—

One straight sword blade, part only  $28\frac{1}{2}$  inches long,  $1\frac{1}{2}$  inches broad.

Several iron arrow heads.

Check piece of a horse bit, iron plated with copper.

Several metal ornaments for the trappings of a horse.

Part of spear head, iron.

One socket piece, iron.

None of the ornaments are gilt, all are simply of iron coated with copper. On the exterior of the mound I found many fragments of red terra-cotta haniwa.

The inner sarcophagus is doubtless that of an emperor or ruler of this important centre in the early history of Japan, and the outer, that of his empress or consort.

On a low upland near the village Enya mura, about a mile to the south of the Imaichi mound is another double mound containing a large dolmen of even greater importance than that just described, by reason of the structure of the dolmen chamber, its two well-hewn sarcophagi, and more especially for the numerous objects, weapons, armour, etc., which were found in it when it was opened in 1886.

The mound has, unfortunately, been reduced by the needs of agriculture and by weathering to a shapeless heap, but from its great length, compared with its breadth, and from the position of the dolmen within it, it was certainly originally a double mound of the imperial type.

The dolmen, with its sarcophagi in situ, is represented in plan and sections in PlateVII. It is contained in the west-north-west end of the mound, and its mouth is directed towards the west-south-west (W.S.W 3° S.). It possesses a single chamber only, and in this the two sarcophagi are placed; the larger longitudinally against the west-north-west side, and the other transversely against the back wall.

The chamber has an average measurement of 21 feet in length, 8 feet 5 inches in breadth, and 9 feet 9 inches in height, and is separated from the entrance gallery by one of the wall stones on each side being set forward, and by a huge capstone which rests upon them as shown in the figure. When the dolmen was opened the entrance to the chamber was closed by hewn blocks built up across the gallery from side to side, some of which are still in position. The floor of the chamber is covered with large and small rounded pebbles.

The total length of the dolmen from the end of the chamber to the mouth of the gallery is 46 feet 8 inches, and its breadth diminishes from 8 feet 8 inches at its inner extremity to 3 feet 5 inches at its entrance. Both the chamber and gallery are constructed of moderately well-hewn blocks of volcanic rock.

The sarcophagi which are more carefully hewn than the walls of the dolmen have each a large well-cut aperture in the front side, that of the smaller being recessed

so that it might be closed with a slab. The aperture in the largest sarcophagus measures 4 feet 1 inch by 1 foot 9 inches and in the smaller 3 feet 5 inches by 1 foot  $4\frac{1}{2}$  inches.

At the bottom of the former is an angular groove leading into the interior, probably intended to allow any water which might find its way into the sarcophagus to drain away.

Their internal dimensions are as follows:—

	Length.	Breadth.	Depth.	Thickness of sides.	Thickness of bottom.
Longitudinal sarcophagus	$\begin{cases} 7' 4'' \text{ top} & \dots \\ 7' 9'' \text{ bottom} & \dots \end{cases}$	$\left\{ egin{array}{ll} 2'10''\mathrm{top} \ 3'3''\mathrm{bottom} \end{array}  ight\}$	3' 2"	9" to 10"	1' 0"
Transverse "	5′ 10″	3′ 1″	2' 3"	6" to 8".	9"

The capacity of both is increased by the lower sides of the covers being hewn out to a depth of 11 inches and 7 inches, respectively.

The chief objects which were found in this dolmen are now in the Government offices at Matsuye. The iron objects are nearly all converted into iron oxide, and, as little care seems to have been exercised in removing them, most are more or less imperfect. No record was made of the position of any in the dolmen, or of the shapeless masses of rust into which many others were oxidized which were thrown away.

#### List of articles now at the Government offices.

- 24 Iron arrow heads.
- 1 Straight iron one-edged sword, with the point broken off. Length of remaining part of blade, 2 feet  $7\frac{1}{5}$  inches; breadth,  $1\frac{1}{2}$  inch.
- Wooden scabbard of the above, mounted with a single encircling band of copper, coated with silver, which bears a simple line pattern of punched dots.
- 1 Iron sword, straight blade,  $16\frac{1}{2}$  inches long. Total length, including grip,  $23\frac{1}{2}$  inches.
- 1 Iron sword, straight blade, 17 inches long. Tang imperfect.
- 1 ,, ,,  $11\frac{3}{4}$  ,, ,
- 7 , spear heads, socketed. Triangular blades.
- 4 ,, halberd-shaped ornaments for horse trappings, coated with copper gilt.
- 8 Iron ornaments for horse trappings, plated with gilt copper.
- 4 ,, ,, ,, ,, ,, ,, ,, ,,
- 2 ,, coated with silver.
- 1 ,, horse-bit, with check pieces of iron open work, plated with gilt copper.
- 1 Iron buckle.

- 1 Bronze bell.
- 2 Covered pots of ordinary dolmen form.

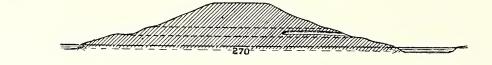
Besides the above there were several magatama (curved beads), and kudatama (bugles).

Respecting the position of these objects in the dolmen, the statements of the officials at the Government office, and of the head man of the village in which the dolmen is situated, were very conflicting; but as he was present at the opening, and assisted in taking out the objects, I am inclined to accept his version.

According to him, the longitudinal sarcophagus contained the short swords, bronze bell, some of the arrow heads, and some of the spear heads.

The transverse sarcophagus contained large masses of iron rust resembling plates of armour, magatama, the long sword, some arrow heads, and the silvered ornaments.

Some spear heads were found outside this sarcophagus near its W.N.W. end, and the horsebit and horse ornaments on its cover.



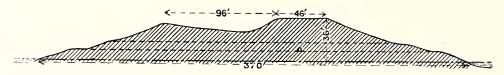


FIG. 15.—LONGITUDINAL AND TRANSVERSE SECTION OF DOUBLE MOUND AT OMURO.

No bones or vermilion were seen, and no pottery excepting the covers of the two shallow dishes, which were found just within the entrance of the chamber.

Leaving Izumo for a tract of country to the north-west of Tokyo, where the provinces of Kozuke, Musashi, and Shimotsuke meet, we find the most remarkable and extensive series of burial mounds which occurs outside the central provinces.

Here, within an area about twenty-five miles long, and about the same breadth, are scattered either singly or in groups about 300 mounds, nearly all containing dolmens. The district to which I gave special attention was that in the neighbourhood of the villages of Oya and Omuro in Kozuke, as one of its noteworthy features is the occurrence of six large double mounds of the imperial type, containing dolmens and one a cist, and two of the former had yielded some interesting vessels of pottery as well as metallic remains.

The occurrence of these double mounds, and the highly ornamented metal work which was found in the dolmens which both these and several of the simple mounds enclose, also the number of *tsuchiningyo* (terra-cotta figures) which

have been unearthed from these and others, indicate clearly that the region was one of the leading centres during the flourishing part of the mound-building period.

The most important of those I examined were two double mounds near the village Ōmuro. The mounds are situated on the north and south of a much larger double mound with two moats, which is said to have never been opened.

The sectional sketch (Fig. 15), made from my own measurements, illustrates the north mound, which is called "Futago yama" or "twin hill." The mound is of the ordinary imperial type, with two terraces, and surrounded by a moat. It is, however, very much weathered, so that these features are partially obliterated. Its direction is E. 20° N., to W. 20° S., the rounded peak being at the eastern end.

Numerous haniwa (terra-cotta tubes) are embedded in the usual manner near the edges of the terraces and summit of both this and the next mound.

The dolmen, which is contained in the round end, is 48 feet in length, and is placed approximately at right angles to the long axis of the mound, with its entrance a little higher than the lower terrace, and facing S. 12° E. It consists of a chamber separated from the outer gallery by two rude slabs fixed vertically against the side walls with a capstone resting upon them, leaving a doorway of about 4 feet by 1 foot 9 inches.

The floor of the hinder part of the chamber for about 6 feet from the back wall is raised about 9 to 10 inches higher than the other part of the floor. Both were paved with large, flat, rough slabs, some of which are still in situ. The dimensions of the chamber are:—

```
Length of Chamber
                                           17 feet.
               Gallery ...
                                           26 ,,
                                           43 "
                       Total length
Chamber:---
    Breadth at back
                                            6 feet 6 inches.
             at front
                       ...5 feet 6 inches to 6 ,,
    Height
Gallery:—
    Breadth
    Height
                               . . .
```

A diagram (Fig. 16) only is given, as it was impossible to make a complete drawing of the interior, owing to the quantity of earth which it contained, and, to obtain the measurements, this had to be dug into at several points.

The dolmen is constructed of unhewn, irregular blocks, none of which are specially remarkable for their size, the largest only measuring about 6 feet by 4 feet 3 inches. The objects which were found in it when it was opened are now in the possession of Mr. Negishi, of Omuro, and have been already described

by Sir Ernest M. Satow in a paper read before the Asiatic Society of Tokyo, Japan.<sup>1</sup>

The most important are the following:—

From the raised part of the chamber:—

4 horse ornaments of iron, plated with gilt copper.

1 small bronze mirror.

1 iron spear head.

Numerous beads of blue glass.

1 penannular ring, plated with gold.

From lower part of the chamber:—

1 horsebit, with cheek-pieces of iron, plated with gilt copper.

1 stirrup iron.

1 iron spear head.

Several iron arrow heads.

17 vessels of pottery, chiefly of types b, d, e, k, f (Fig. 22), but several of softer clay than ordinary dolmen pottery.

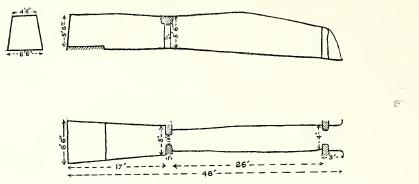


FIG. 16.—PLAN AND SECTIONS OF DOLMEN IN THE DOUBLE MOUND AT OMURO.

The head of a  $tsuchi-ningy\bar{o}$  (terra-cotta figure) was found buried in the earth on the outside of the mound.

The horse ornaments and cheek-pieces of a bit are practically identical with those in the British Museum, which I obtained from a dolmen in Tamba.<sup>2</sup>

A notable feature of the mound, which, however, as we have already seen, is not peculiar to it, is its imposing size when compared with that of the dolmen it contains. This teaches us how very careful we should be in our explorations of sepulchral mounds in pronouncing any to be without a chamber, although we may have sunk shafts and driven tunnels in them without finding one. In this example we might have sunk a shaft from the middle of its summit to its base, and tunnelled through it from end to end along its median line, and never found the comparatively large dolmen which it contains.

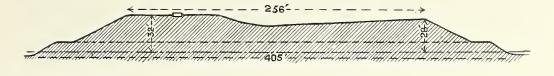
The southern mound, which is called "Uchibori tsuka," is slightly smaller than

<sup>&</sup>lt;sup>1</sup> Trans. of the Asiatic Society of Japan, vol. vii, 313, et seq.

<sup>&</sup>lt;sup>2</sup> Archaologia, vol. 55, Figs. 29, 30A, pp. 487, 488.

that just described, and has only one terrace, but otherwise it is similar to it. The dolmen it contains is similarly placed, but is only 27 feet 6 inches in total length, and faces S. 25° W. The chamber is large, 21 feet 6 inches long, 8 feet 4 inches wide at the back, and 5 feet at the front, and 7 to 8 feet high. At a distance of 9 feet from its back wall it is divided into two by two slabs of stone placed transversely across the floor and rising about 13 inches above it. The inner portion of the floor is strewn with round pebbles.

It is merely a form of allée couverte, its walls gradually converging to the entrance to the short gallery. The floor is about on a level with the top of the terrace.



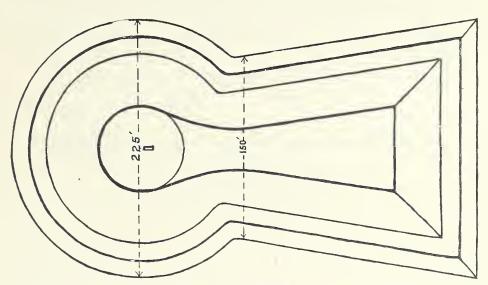


FIG. 17.—PLAN AND SECTION OF DOUBLE MOUND WITH A SARCOPHAGUS EXPOSED ON ITS SUMMIT.

The remains found in this mound were as follows:—

Four iron swords,

Several iron rings

- human teeth
- ,, iron arrow-heads,

Six vessels of pottery of ordinary dolmen shapes.

A large double mound about four miles to the south of the above is worthy of note, as it contains no dolmen, but merely a stone sarcophagus, which is placed at the summit of the round peak. It is the only example I have found of a mound of this form containing a sarcophagus not placed in a dolmen chamber although such is by no means uncommon in simple conical mounds. The mound

with the sarcophagus in situ is shown in Fig. 17. The mound lies E. 20° N., W  $20^{\circ}$  S., and the sarcophagus has the same direction. Its base measures approximately, length, 405 feet, extreme breadth, 225 feet, height, 32 feet, and it has been surrounded by a double moat. The sarcophagus consists of two longitudinal side slabs rather roughly hewn, which are channelled to receive the transverse slabs forming the ends. The bases of these slabs rest on a ledge cut in the large slab forming the bottom. The interior dimensions are, length, 6 feet  $7\frac{1}{2}$  inches, breadth, 2 feet 9 inches.

The sarcophagus now projects about 6 inches above the ground, but originally it was covered with earth, which was removed when the summit was levelled long ago to form a site for a Shinto shrine. Fragments of *haniwa* are found on the mound, and these and its double form are the only clues to its approximate age.

Another important and, in fact, the most ancient, centre of the early rulers is the island of Kyushu. Many of the very numerous mounds there have been opened and a great number of objects have been obtained from their chambers. The

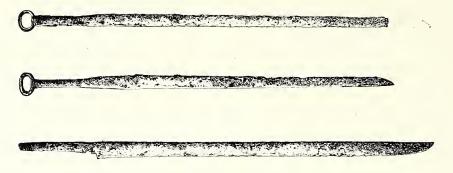


FIG. 18.—SWORDS FROM THE HIGO DOLMEN.

mounds are chiefly of the simple conical type, some being of imposing size, and most contain a dolmen.

Double mounds of imperial form also occur. Some of the most important objects which have yet been found in any burial mound were taken out from the dolmen chamber of a double mound in the province of Higo, which has been previously mentioned as having had many stone figures of men set up upon it. The objects taken from this mound are now in the Imperial Museum, Tokyo. They comprise, amongst others of more common occurrence:—

Fourteen sword blades, three of which are illustrated in Fig. 18.

The longest blade is 3 feet 0.5 inch long and its tang  $8\frac{1}{2}$  inches, the total length being 3 feet 9 inches. The shortest blade is 2 feet 6 inches long with a tang of 6 inches.

Some pieces of armour and a helmet of special interest were found together with the swords, also several spear heads.

The armour consisted of two cuirasses, one of which is illustrated in Fig. 19. It is formed of iron plates very skilfully forged and riveted together. The helmet is of similar construction. Both the helmet and the cuirasses are entirely different

in form from those of historical times, but the latter agree very closely with the armour represented on the terra-cotta figure ( $tsuchi\ ningy\bar{o}$ ). Fig. 6.

Thin plates or bands of gilt copper seem to have played an important part in the decoration of the robes of the dead. They are of frequent occurrence in the dolmen chamber of important mounds, and are always found along with the fragments of bones, when there are any, or in that part of the chamber where the body had lain.

The largest piece from this mound is a broad band of copper gilt foil, ornamented with a hexagonal net-like pattern, the decorative effect being increased by a small circular pendant of gilt copper foil suspended by wires from the angles of the hexagons. But more important than these by reason of its elaborate decoration is a tiara of gilt copper having in addition to the punched dot decoration, rich scroll designs in pierced work.

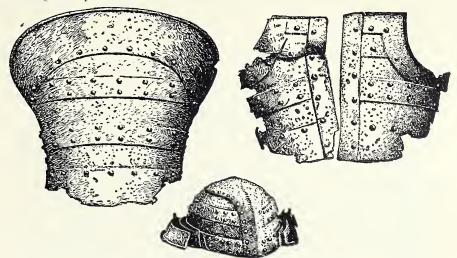


FIG. 19.—IRON CUIRASS AND HELMET. \(\frac{1}{8}\) LINEAR, (Reproduced by the courtesy of the Council of the Society of Antiquaries.)

Besides the above there were also found two pendants and earnings of solid gold with small beads of green enamel like glass set in the former as jewels.

The shoes of the Higo warrior are also of copper thickly gilt. These like the broad band are ornamented with the hexagonal pattern with pendants suspended from the angles.

Along with these splendid examples of metal work, there were also found 2 iron stirrups, 2 horse bits, 52 ordinary beads of blue glass, 11 cylindrical beads of green jasper, and a covered earthenware dish, all of which are precisely identical with those found in dolmen mounds in Kozuke, Izumo, Kawachi and other provinces.

Six Chinese mirrors were also found with the above, and from these the approximate date of the mound has been determined to be not later than the third or fourth century of our era.

This double mound, from the objects found in its dolmen, must, I think, be considered to be the tomb of a ruler of imperial rank.

The most important weapon in all these burial mounds is a straight one-edged sword. This one-edged sword has one special characteristic, *i.e.*, it has a perfectly straight back, and it is thus distinguished from the curved swords of later times. It is, in fact, essentially the sword of the period of the dolmen

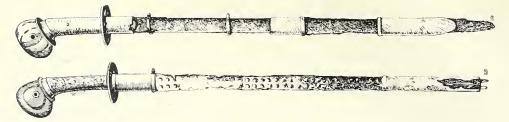


fig. 20.—swords from Musashi.

mounds, first appearing at its beginning and dying out, and being displaced by the curved blade at its close.

These swords are of two kinds, viz., long and short. The former are most numerous, and the length of their blades from guard to point varies generally from 2 feet 6 inches to 3 feet. The latter vary from 1 foot 8 inches to 2 feet.

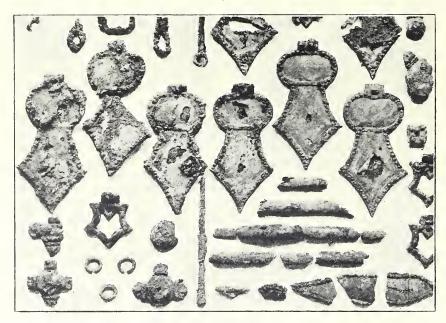


FIG. 21.—ORNAMENTAL APPENDAGES OF HORSE-TRAPPINGS FROM A DOLMEN AT ROKUYA (TAMBA).

(Reproduced by the courtesy of the Council of the Japan Society.)

The two swords in Fig. 20 are from a double mound in Musashi. They are remarkable for the rich ornamentation of their scabbards and grips, which are plated with gilt copper.

Of all the metal objects found in burial mounds, not even excepting the swords the bits and other furniture of the horse are generally the most richly ornamented.

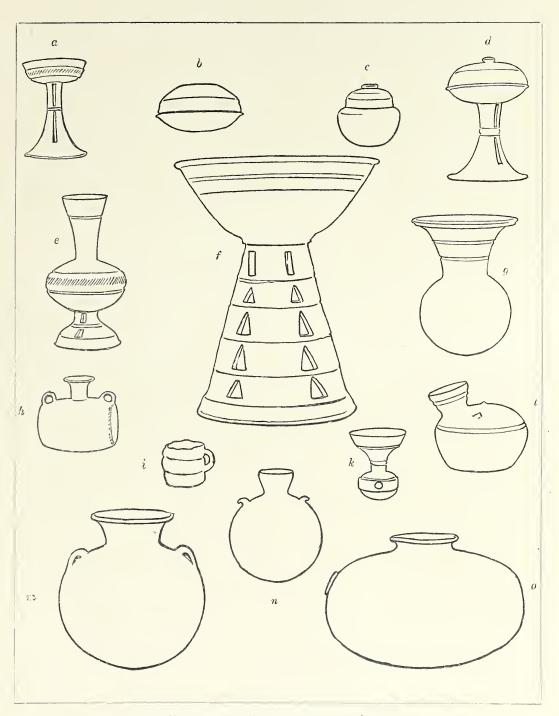


FIG. 22.—CHIEF TYPES OF THE POTTERY.  $\frac{1}{8}$  LINEAR. (Reproduced by the courtesy of the Council of the Society of Antiquaries.)

In Fig. 21 are represented some of the halberd-shaped appendages which were attached to various parts of the hempen trappings of a horse. They consist of iron plates covered with thin copper foil which is generally coated with gold. Those shown in the figure are precisely analogous to the four which were taken from the dolmen in the double mound at Omuro (Kozuke).

Considerable quantities of pottery have also been found in every group of dolmen mounds.

Typical forms of the vessels are shown in Fig. 22, but more elaborate forms also occur in the more important burial mounds. An account of all this sepulchral pottery will be found in my paper, "The Dolmens and Burial Mounds of Japan," already cited.

It will hence suffice for me to say here that the vessels are most numerous in the dolmen chamber, but they are also found in the gallery and on the south side of the circular mounds. In double mounds they also occur on the summit of the square end.

I have been unable to give an account of the contents of the imperial mounds in the central provinces which I have described, as, with the exception of the misasagi of the Emperor Nintoku, there is no record of the opening or exploration of any; and all it has been possible to ascertain about the objects found in the mound of that emperor is that they consisted of iron armour and one or more straight swords. The armour is said to have closely resembled the cuirass (Fig. 19) which was found in the dolmen chamber of the Higo mound. Although all appear to have been rifled, the penalties attaching to robbery of an imperial burial mound are so severe that whatever has been found has been disposed of secretly. In nearly all cases, too, if we may judge from the present ruinous condition of most of the mounds, this rifling took place many years, probably many centuries, ago.

On a review of the fragmentary evidence available, however, the objects appear to have been magatama (curved beads) of various stones (Fig. 23), kudatama

(cylindrical beads) of green jasper, other beads of glass, steatite, and rock crystal, ornaments or insignia of jasper, armlets of steatite, iron armour, straight iron swords, horse bits, and ornaments of the saddle and trappings; also many kinds of vessels of grey earthenware, of which typical forms are given in Fig. 22.



FIG. 23.

Magatama. ½ linear.
(Reproduced by the courtesy of the Council of the Society of Antiquaties.

Fortunately, in the other centres of ancient rule in Izumo, Kyushu, and in the somewhat later one, the district of

Musashi and Kozuke, several mounds of imperial form have been opened in recent times. Their contents, some of which I have already described, have been more or less carefully recorded and preserved, and afford us a tolerably complete presentment of the appurtenances of sepulture of an emperor or ruler in a double mound.

In most countries the building of mounds, especially of dolmen mounds, is associated with a rude stage in the civilisation of a race. The remains found in

them are few, and where they occur they are mostly of stone or bronze, and rarely of iron. But in Japan all the larger mounds and the dolmens, even the rudest, belong to the iron age.

The Japanese, indeed, during this period, had reached a very high stage of civilisation. They were expert metallurgists and workers in metal, skilful as potters, and had even then developed those artistic traits for which in later times they have become so distinguished.

When a chieftain was laid in the rude stone chamber of a mound, his wants in a future world, where he was supposed to continue his existence, were supplied in unstinted measure. He was clothed in his robes, adorned with his personal ornaments, his implements of war and of the chase, and the bits and trappings of his horse were all placed near him. Around and at the entrance of the dolmen chamber were arranged offerings of food, water, wine and flowers, in vessels of pottery, some of which are of elaborate forms.

During the period of the double mounds, the bodies of the dead were not cremated, and there are the strongest grounds for believing that in the still more remote times of the earliest simple burial mounds inhumation alone was practised.

Unfortunately, no well or even moderately preserved skeleton has yet been found in any dolmen mound. The damp atmosphere of the chamber, and the free infiltration of water through the spaces between the stones in both walls and roof appear to have been most destructive to bone, removing nearly the whole of its organic matter and resolving it into bone earth. So much so, that when human bones are found, they are always in such a state of decay that they can be rubbed to powder between the fingers, and occur in such small fragments that so far it has not been possible to obtain any useful measurements.

The body was laid in a sarcophagus of wood, stone or terra-cotta. When the sarcophagus was of stone, it might be supposed from its structure (see below), that the bones would not have perished. Most of these, however, have been rifled in bygone times, and in the few which have been opened during recent years no bones are said to have been found, so that in these also the bones had decayed and were in the form of earth or very small fragments.

A considerable amount of light is thrown on the history, civilisation and customs of the ancient Japanese by these burial mounds and their remains. In the early part of the period during which they were builders of double mounds, they seem to have been a collection of independent or semi-independent clans of the same race, armed with the same weapons, and having the same burial customs

<sup>&</sup>lt;sup>1</sup> Cremation in Japan only dates from the establishment of Buddhism in the country (sixth and seventh centuries A.c.) and the first of the imperial line whose body was burned before burial is said to have been the Empress Jito (p. 702), but this is rather doubtful. However, in A.D. 840, the body of the Empress Junna was undoubtedly cremated, and it is worthy of note in connection with the rites as then followed, that the cremation did not take place near the tomb, but about three miles distant, and that two mounds, both of which I visited, were erected to his memory, one to mark the site of the cremation and the other the spot where the ashes were buried.

and religious beliefs. They occupied certain distinct centres—now marked by extensive groups of dolmen and burial mounds. These are separated from one another by more or less wide tracts of country where few or no sepulchral mounds are found. The country was then, in fact, only very partially occupied by them.

The chief of these centres are four in number, viz.:-

The central provinces, Settsu, Izumi, Yamato and

Kawachi ... ... Yamato centre.

Izumo, Hoki ... ... Izumo centre.

North and East provinces of Kyushn ... Kyushu centre.

Kozuke, Musashi, Shimotsuke ... ... Musashi centre.

To these may perhaps be added another. Bizen and its adjacent province Bingo, although this centre was probably of later date than the others.

The province of Yamato, according to Japanese ancient records, was the locus of a central government in early times. Its chief rulers are styled emperors, and are held to have been supreme in authority over the whole country. This is open to serious doubt so far as the early half of the dolinen mound period is concerned. The characteristic form of an imperial burial mound for the Yamato rulers of that time is the huge double mound, but precisely the same form of mound is also found, as we have seen, in the four other centres associated with groups of dolmens. It is true that the double mounds are more numerous, and some are larger in the Yamato centre than in the others, yet unless the tribes occupying the latter were independent or their rulers were regarded as the equals of the Yamato chiefs, no mounds of this imperial form should be found in them at all. Besides, the objects which have been found in some of the mounds of these four districts indicate even greater wealth and magnificence of display than those found in the Yamato centre to which the sites of successive imperial courts are assigned. The Yamato rulers subsequently acquired sway over them, but not until a considerable part of the period under consideration had elapsed.

In this connection it must not be overlooked that in the province of Yamato and Kawachi there are many double-peaked mounds of vast size and imposing appearance without either name or tradition attached to them, and quite uncared for, whilst in close proximity comparatively insignificant tumuli are recognised as the burial places of known emperors, and have official custodians allotted to them.

Professor Basil Hall Chamberlain has approached this question of the supremacy of the Yamato emperors from the point of view of the ancient records, and I may be permitted here to quote his opinion as given in the introduction to his translation of the *Kojiki*.

"We find that the 'Territorial owners' of Yamato, and the 'Rulers' of Idzumo, whom Jimmu or his successors are said to have subjugated, are constantly spoken of in the plural, as if to intimate that they exercised a divided sovereignty.

"During the whole of the so-called 'Human age' we meet both in parts of the country which were already subject to the Imperial rule, and in others which were not yet annexed, with local magnates bearing these same titles, 'Territorial

Owners,' 'Rulers,' 'Chiefs,' etc., and the impression left on the mind is that in early historical times the sovereign's power was not exercised directly over all parts of Japan, but that in many cases the local chieftains continued to hold sway though owing some sort of allegiance to the emperor in Yamato, while in others the emperor was strong enough to depose these local rulers, and to put in their place his own kindred or retainers, who, however, exercised unlimited authority in their own districts, and used the same titles as had been borne by the former native rulers, that, in fact, the government was feuda rather than centralised."

He further states: "The question of the ancient division of Japan into several independent states is, however, not completely a matter of opinion. For we have in the 'Shang Hai Ching' a positive statement concerning a northern and a southern Yamato, and the Chinese annuls of both the Han dynasties tell us of the division of the country into a much larger number of kingdoms, of which, according to the annuls of the later Han dynasty, Yamato was the most powerful."

I may add that since A.D. 1242, beginning with the Emperor Shijo, all the emperors have been buried in the grounds behind the temple Senyuji, Kyoto.

The late Emperor Komei, who died in 1866, was buried in a wooden sarcophagus in a terraced mound on the summit of a natural hill in the above grounds (Plate VIII). Several megalithic blocks, which crown the top of the mound, may be regarded as a survival of the ancient practice of dolmen burial.

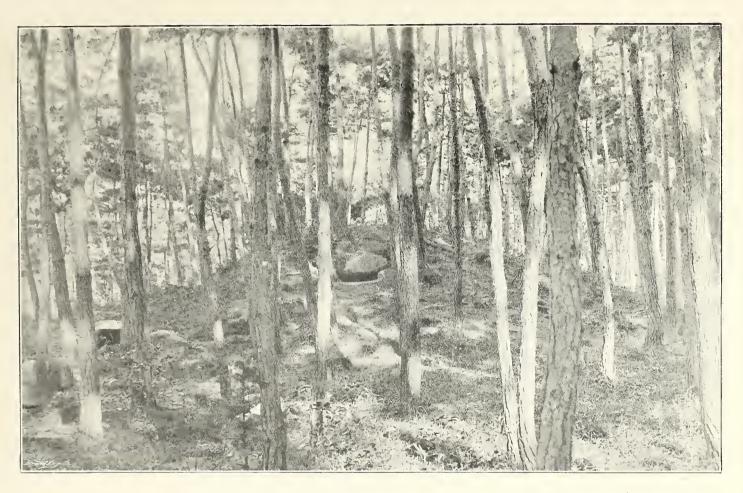
<sup>1</sup> Kojiki, or Records of Ancient Matters (date A.D. 712). Translation by B. H. Chamberlain. Introduction, p. lxii, lxiii.

[Reprinted from the Journal of the Royal Anthropological Institute, Vol. XXXVII, January-June, 1907.]

'		



	•		
			*
		•	



EXTERNAL VIEW OF A MOUND CONTAINING A DOLMEN AT ASAKURA (1YO).  $(Reproduced\ by\ the\ courtesy\ of\ the\ \textit{Council}\ of\ the\ \textit{Japan\ Society.})$ 

	٠	•	
		4	



DOUBLE MOUND CONTAINING A DOLMEN AT MISE (YAMATO).

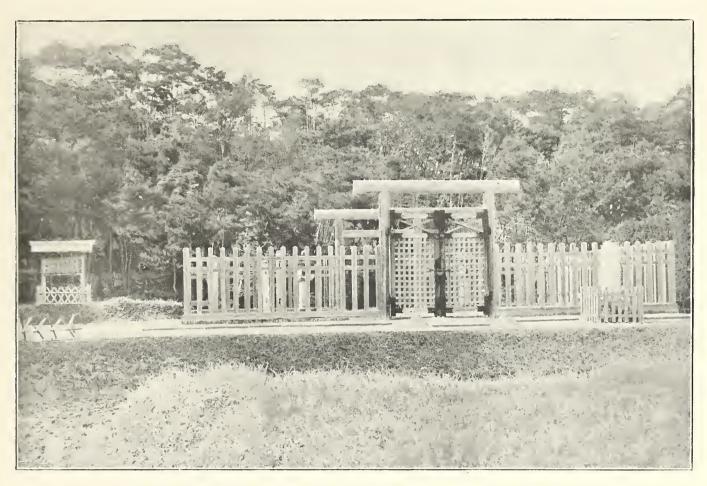
(Reproduced by the courtesy of the Council of the Japan Society.)



FIG. 1.—MISASAGI OF KEITAL



FIG. 2.—CEREMONY AT JIMMU'S TOMB.



SACRED ENCLOSURE IN FRONT OF THE TUMULUS OF THE EMPEROR KEITAI (DIED 531 A.D.).

(Reproduced by the courtesy of the Council of the Japan Society.)

7		



FIG. 1.—MISASAGI OF CHUAI.



FIG. 2.—MISASAGI OF NINTOKU.

THE DOLMENS AND BURIAL MOUNDS OF THE EARLY EMPERORS OF JAPAN.

	·	

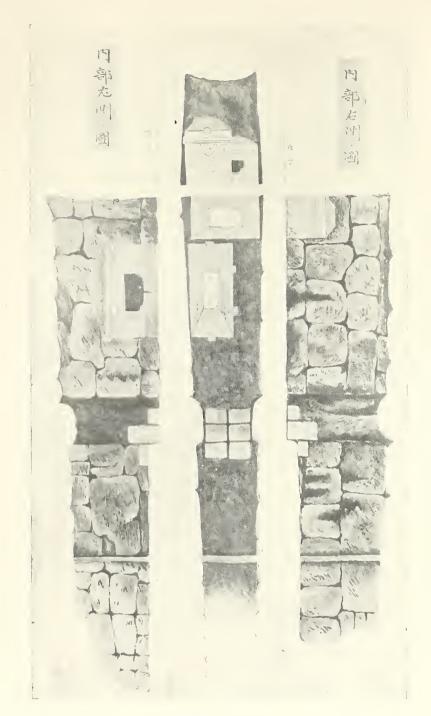


FIG. 1.—MISASAGI OF THE EMPEROR RICHU.

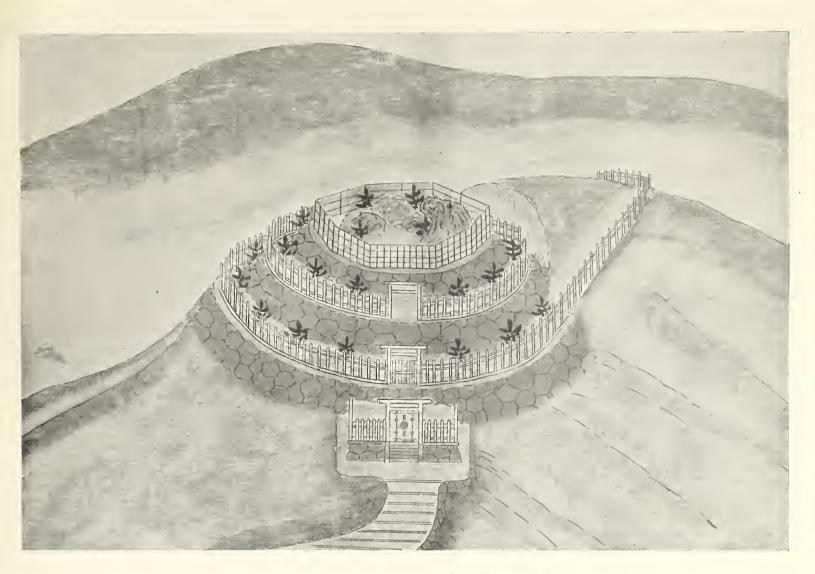


FIG. 2.—MISASAGI OF THE EMPEROR INGYO.

THE BURIAL MOUNDS AND DOLMENS OF THE EARLY EMPERORS OF JAPAN.



 $\mbox{ dolmen at enya.}$  The burial mounds and dolmens of the early emperors of Japan.



BURIAL MOUND OF THE LAST EMPEROR (from a Japanese Print).







GETTY CENTER LIBRARY

3 3125 00122 4381

